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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,171	04/30/2001	Max Jaffe	130149-1000	4933

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GARDERE WYNNE SEWELL LLP  
INTELLECTUAL PROPERTY SECTION  
3000 THANKSGIVING TOWER  
1601 ELM ST  
DALLAS, TX 75201-4761

EXAMINER

PATEL, JAGDISH

ART UNIT	PAPER NUMBER
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3693

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/846,171	JAFJE, MAX	
	Examiner	Art Unit	
	JAGDISH PATEL	3693	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 September 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) 13-15, 18-23, 32-34, 37-42, 51-53 and 56-61 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 16, 17, 24-31, 35, 36, 43-50, 54 and 55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____.                                     |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/01, 10/02</u> .   | 6) <input type="checkbox"/> Other: _____.                         |

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## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election without traverse of Species A containing claims 1-12, 16-17, 24-31, 35-36, 43-50, 54 and 55 in the reply filed on 9/5/06 is acknowledged.
2. Claims 13-15, 18-23, 32-34, 37-42, 51-53 and 56-61 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 9/5/06.

### *Claim Rejections - 35 USC § 101*

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-12, 16-17, 24-31, 35-36, 43-50, 54 and 55 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

#### **The claim recite non-statutory process**

The instant claims recite mathematical algorithm which solve a problem of generating a spreadsheet (arrangement of budget related data as enumerated in step "providing a worksheet" of claim 1.) A mathematical algorithm is defined as a "procedure for solving a given type of mathematical problem." *Gottschalk v. Benson*, 409 U.S. 63, 65, 175 USPQ 673, 674 (1972); *Flook*, 437 U.S. at 585 n.1. 198 USPQ at 195 n.1; *Diehr*, 450 U.S. at 186, 209 USPQ at 8. **Mathematical algorithms are non-statutory because they have been determined not to fall within the § 101 statutory class of a "process."** *Benson*. "[A]n algorithm, or mathematical formula, is like a law of

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nature, which cannot be the subject of a patent." Diehr, 450 U.S. at 186, 209 USPQ at 8.

The exception applies only to mathematical algorithms since any process is an "algorithm" in the sense that it is a step-by-step procedure to arrive at a given result. In re Walter, 618 F.2d 758, 764 n.4, 205 USPQ 397, 405 n.4, (CCPA 1980); Pardo, 684 F.2d at 915, 214 USPQ at 676.

**A mathematical algorithm is not made statutory by "attempting to limit the use of the formula to a particular technological environment."** Diehr, 450 U.S. at 191, 209 USPQ at 10. Thus, "field of use" or "end use" limitations in the claim preamble are insufficient to constitute a statutory process. This is consistent with the usual treatment of preambles as merely setting forth the environment. See Flook (the preamble while limiting the application of the claimed method to "a process comprising the catalytic chemical conversion of hydrocarbons" did not serve to render the method statutory); Walter, 618 F.2d at 769, 205 USPQ at 409 ("Although the claim preambles relate the claimed invention to the art of seismic prospecting, the claims themselves are not drawn to methods of or apparatus for seismic prospecting"); de Castelet, 562 F.2d at 1244 n.6. 195 USPQ at 446 n.6 ("The potential for misconstruction of preamble language requires that compelling reason exist before that language may be given weight"). Compare Waldbaum, 559 F.2d at 616 n.6. 194 USPQ 469 n.6 (portion of preambles referred to in method portion of claims "are necessary for completeness of the claims and are proper limitations thereto").

Data-gathering steps

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If the only limitations in the claims in addition to the mathematical algorithm are data-gathering steps which "merely determine values for the variables used in the mathematical formulae used in making the calculations." Such antecedent steps are insufficient to change a nonstatutory method of calculation into a statutory process. See *In re Richman*, 563 F.2d at 1030. 195 USPQ at 343; *Sarkar*, 588 F.2d at 1335. 200 USPQ at 139 ("If the steps of gathering and substituting values were alone sufficient, every mathematical equation, formula, or algorithm having any practical use would be per se subject to patenting as a 'process' under §101"): *Gelnovatch*, 595 F.2d at 41 n.7. 201 USPQ at 145 n.7 ("claimed step of perturbing the values of a set of process inputs (step 3), in addition to being a mathematical operation, appears to be a data-gathering step"). Where the claim "presents data gathering steps not dictated by the algorithm but by other limitations which require certain antecedent steps" the claim may present statutory subject matter. *Abele*, 684 F.2d at 908, 214 USPQ at 687.

The claimed inventions recite data gathering steps (determining the funds..., identifying expenditure, classifying the expenditure as one of a category) and applying this data in computing the maximaizable cost and generating a cumulative cost. When viewed in light of the specification, these steps constitute data gathering (inputs from user relevant to the budget related parameters) and a mathematical algorithm applied to the data input by a user (classifying, computing and generating process). As per the court rulings cited above, the claims constitute mathematical algorithm(s) applied to data gathered in the respective process steps. The fact that the mathematical algorithm is applied to solve a problem of generating a spreadsheet for budgeting does not make the

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claim statutory. *Walter*, 618 F.2d at 764-65 n.4, 205 USPQ at 405 n.4. "The type of mathematical computation involved does not determine whether a procedure is statutory or nonstatutory." *In re Gelnovatch*, 595 F.2d 32, 41.201 USPQ 136, 145 (CCPA 1979). A "claim for an improved method of calculation, even when tied to a specific end use, is unpatentable subject matter under §101." *Flook*, 437 U.S. at 595 n.18, 198 USPQ at 199 n.18. Mathematical algorithms may represent scientific principles, laws of nature, or ideas or mental processes for solving complex problems. See *Meyer*, 688 F.2d at 794-95, 215 USPQ at 197.

The apparatus claims (claims 43-50, 54-55) are analyzed based upon the underlying process. In the instant case these claims recite process of the respective method claims. See the following explanation.

Labels are not determinative § 101 inquiries. "Benson applies equally whether an invention is claimed as an apparatus or process, because the form of the claim is often an exercise in drafting." *In re Johnson*, 589 F.2d 1070, 1077, 200 USPQ 199, 206 ([CCPA] 1978). "Though a claim expressed in 'means for (functional) terms [under 35 U.S.C. § 112, sixth paragraph] is said to be an apparatus claim, the subject matter as a whole of that claim may be indistinguishable from that of a method claim drawn to the steps performed by the 'means,'" *In re Freeman*, 573 F.2d at 1247, 197 USPQ at 472. Moreover, that the claimed computing system may be a "machine" within "the ordinary sense of the word," as appellant argues, is irrelevant. The holding in *Benson* "forecloses a purely literal reading of § 101."

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The test for determining whether "means for" apparatus claims should be treated as method claims is stated in *Walter*, 618 F.2d at 768, 205 USPQ at 408:

If the functionally-defined disclosed means and their equivalents are so broad that they encompass any and every means for performing the recited functions, the apparatus claim is an attempt to exalt form over substance since the claim is really to the method or series of functions itself.

The claims are also non-statutory under 35 USC 101 because they fail to produce a Useful, Concrete, and Tangible Result.

**The claims do not produce concrete result.**

Usually, this question arises when a result cannot be assured. In other words, the process must have a result that can be substantially repeated. Note that the focus is on the result, not the steps themselves. For example, concrete data processing steps could still produce an unrepeatable result if the data being processed is subjective. Broadly interpreted, the method claims recite manual acts and therefore renders the inputs and calculations subjective, which cannot assure a reproducible result. For example, there is no standard provided in the claims for determining the funds total from an income amount, identifying the expenditure as one of a category of a plurality of categories etc., are manual steps and therefore, subjective or abstract. The computer implemented (apparatus) claims do not overcome this problem because the claims do specify any specific manner in which the recited steps of identifying, determining, classifying and generating are carried out. Note mere recitation of a process step (such as generating the

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cumulative cost) without any underlying algorithm are too broad to be specific because process steps can be carried out in many different ways. Therefore, mere reciting broad processing steps in a computer apparatus (see for example, claims 43) does not resolve this defect.

**The claimed inventions do not produce a tangible result .**

If the result is merely a thought, this is not a tangible or real-world result. For example, merely determining or calculating a price may not be held to be a tangible result, instead reasonably being interpreted as just a thought or a computation within a processor; however, calculating a price of an item to sell and then conveying the calculated price to a potential customer would be a tangible result. In the instant case the claims recite mathematical algorithm which updates a worksheet having arrangement of budget related parameters. However, there is no connection of the spread sheet to the real world. For example, the producing a budget using the claimed process and delivering to the user wherein the user relies upon the budget for household financial planning would constitute a tangible result. Note that the tangibility test is applied distinctively from the other prongs of the practical application.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.



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5. Claims 1-12, 16-17, 24-31, 35-36, 43-50, 54 and 55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Analysis for claim 1 is provided as exemplary claim analysis.

Claim 1 recites process steps too broadly to be determined how the process can be performed. For, claim 1 recites computing the maximaizable cost associated with the expenditure. However, it would not be apparent to one of ordinary skill in the art how the maximaizable cost would be calculated without the claim specifying any relationship of said term with the expenditure and the category of the expenditure. Likewise, the funds total is recited as being determined from an income amount without any relationship of the two being specified. Note that, although, the applicant may wish to recite the process in broadest terms, if the process is so broad as to encompass every possible way of carrying out the process leads to indefiniteness because the outcome of the process will depend upon the manner in which the process is carried out. (Refer to lack of “concreteness” discussed under 35 USC § 101 rejections.

All independent claims are similarly analyzed. Dependent claims do not resolve this deficiency. Accordingly, all pending claims are rejected under 35 USC § 112 for the same rationale.

Examiner’s Note: The term “maximaizable cost” has been interpreted in context of the specification. The specification defines this term at least as follows:

[0039] The maximizable cost 40 associated with each expenditure 18 will represent a unique hourly number associated with the expenditure 18. The maximizable cost 40 is determined by computing a maximizable factor 42 which will be discussed hereinafter in greater detail with respect to FIG. 7.

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***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAGDISH PATEL whose telephone number is (571) 272-6748. The examiner can normally be reached on **800AM-630PM Mon-Tue and Thu.**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammel can be reached on (571) 272-6712. The fax phone number for the organization where this application or proceeding is assigned is 517-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jagdish N. Patel

(Primary Examiner, AU 3693)

11/15/06